

**ADHESIVE COMPOSITION AND METHODS FOR USE IN
SEMICONDUCTOR APPLICATIONS**

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Abstract of the Disclosure

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An adhesive composition and methods incorporating the adhesive composition in semiconductor applications are provided. The adhesive composition is an instant setting adhesive composition that does not require external energy input such as heat or radiation such for application of the adhesive composition on a surface. The instant setting composition possesses sufficient thixotropic characteristics such that applying the instant setting adhesive composition to a surface can be accomplished by a variety of application techniques and in a variety of patterns. Once applied to the surface, the instant setting adhesive composition sets to retain the discrete pattern as applied, in a relatively short period of time, typically from about 0.10 to about 120 seconds at an ambient temperature, typically from 20° C to 30° C. Advantageously, the instant setting adhesive composition can be screen printed on a semiconductor wafer prior to singulation because streets between the dice are essentially free of the instant setting adhesive composition.

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